(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

(10) International Publication Number WO 2004/088457 A3

(51) International Patent Classification7:

G06F 17/60

(21) International Application Number:

PCT/US2004/008924

- (22) International Filing Date: 24 March 2004 (24.03.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/457,223

25 March 2003 (25.03.2003)

- (71) Applicant (for all designated States except US): PREDIC-TIVE MEDIA CORPORATION [US/US]; 689 Massachusetts Avenue, Cambridge, MA 02139 (US).
- (71) Applicant and
- (72) Inventor: ODDO, Anthony, Scott [US/US]; 20 Austin Street, Hyde Park, MA 02136 (US).

- (74) Agent: SPEIDEL, Paul; Gesmer Updegrove LLP, 40 Broad Street, Boston, MA 02109 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, **7.W**
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: GENERATING AUDIENCE ANALYTICS

Provide a database comprising a plurality of user input pattern profiles representing the group of users of the terminal device, wherein each user of the group is associated with one of the plurality of user input pattern profiles. Detect a user input pattern based upon use of the terminal device by the current user 104 Use a clickstream algorithm, tracking algorithm, neural network, Bayes classifler algorithm, fusion algorithm or affinity-daypart algorithm to generate the plurality of use input pattern profiles. 106 Match the user input pattern of the current user with one of the user input pattern profiles contained in the database. 108 identify the current user based upon dynamic matching of the user input pattern generated by the current user with one of the user input pattern profiles. 110 Process each user input pattern profile to identify a demographic type. 112 Provide a plurality of biometric behavior models wherein each biometric behavior model identifies a unique demographic type. 114 Compare each user input pattern profile against the plurality of biometric behavior models to match each user input pattern profile with one of the biometric behavi models such that each user input pattern profile is correlated with one demographic type. 116 Generate audience analytics based upon the identified user input pattern profiles and demographic types. 118

(57) Abstract: The present invention is directed to generating audience analytics that includes providing a database containing a plurality of user input pattern profiles representing the group of users of a terminal device, in which each user of the group is associated with one of the plurality of user input pattern profiles (102). A clickstream algorithm, tracking algorithm, neural network, Bayes classifier algorithm, or affinity-day part algorithm can be used to generate the user input pattern profiles (106). Each user input pattern profile is compared against the plurality of biometric behavior models to match each user input pattern profile with one of the biometric behavior models such that each user input pattern profile is correlated with one demographic type (116). Audience analytics are then based upon the identified demographic types (118).



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 10 February 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.
PCF/US04/08924

A CLASSIFICATION OF SUBJECT AS A TEST		
A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : G06F 17/60		
1		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
U.S.: 705/10		
•		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
East, Proquest		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages Relevant to claim No.
Υ	Frook, John Evan. Web Add-On Helps Identify Site	Visitors. CommunicationsWeek. 1-42
	Manhasset: Oct 30, 1995. pg. 27 from proquest	Visitors. Communications week.
Λ	CashaClass Dallings at O. C. and C. D. H.	
	Feb 12, 2001. from Proquest. page 2	
Y	110 5 0 4 0 3 0 / (C) 1 0 3 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	US 3,848,396 (Gerace) & December 1998, abstract; column 4, lines 11-47; column 6, lines 1-	
Y		
•	US20010049620 (Blasko, John P) 6 December 2001, abstract; paragraphs 0042, 0043, 0047, 0048,	
	0046,	
Further documents are listed in the continuation of Box C.		See patent family annex.
 Special categories of cited documents: "T" 		
"A" document	defining the general state of the on which is not a continued at the	date and not in conflict with the application but cited to understand the
	defining the general state of the art which is not considered to be of relevance	principle or theory underlying the invention
		"X" document of particular relevance; the claimed invention cannot be
"E" earlier app	plication or patent published on or after the international filing date	considered novel or cannot be considered to involve an inventive step
"L" document	which may throw doubts on priority claim(s) or which is cited to	when the document is taken alone
	the publication date of another citation or other special reason (as	"Y" document of particular relevance; the claimed invention cannot be
specified)		considered to involve an inventive step when the document is
"O" document referring to an oral disclosure, use, exhibition or other means		combined with one or more other such documents, such combination
g a series and the series are the se		being obvious to a person skilled in the art
"P" document published prior to the international filing date but later than the		"&" document member of the same patent family
priority date claimed		
Date of the actual completion of the international search Date of the actual completion of the international search		Date of mailing of the international search report
		28 DEC 2004
29 October 2004 (29.10.2004)		20 DEC EDUT
•		Taria Hatiz Alpe for
Mail Stop PCT, Attn. ISA/US		Turin Hatin Jolish Little
Commissioner for Patents P.O. Box 1450		Tariq Hafiz To Volum FOC
		Telephone No. 703-305-1115
Facsimile No. (703)305-3230		• • • • • • • • • • • • • • • • • • • •

Form PCT/ISA/210 (second sheet) (January 2004)